

GGCGCGGCGCCCGAGGCAGGGAGCAAGAGGCAGCCGGAGCCGAGGGATCCACC
GCCGCCGCGCGGCCATGGAGCCCAGTGAGCGCGCGCTCCGGCCGCCGCG
GACGACATGGAAACGGCGCCGACCCGGGCCCCCTCCGCCGCCGCCGCCGCT
GCTGCTGCTGGTGTACTGCAGCTTGGTCCCCGCCGCCCTCACCGCTCC
TGTTGTTGCCAACCGCCGGATGTGCGGCTAGTGGATGCCGGGGAGTGAAG
CTGGAGTCCACCATTGTGGCCAGTGGCCTGGAGGATGCAGCTGCTGTAGACTT
CCAGTTCTCCAAGGGTGTGTACTGGACAGATGTGAGCGAGGGAGGCCATCA
AACAGACCTACCTGAACCAGACTGGAGCTGCTGCACAGAACATTGTCATCTCG
GGCCTCGTGTACCTGATGGCCTGGCCTGTGACTGGGTTGGCAAGAAGCTGTA
CTGGACGGACTCCGAGAACCAACCGCATTGAGGTTGCCAACCTCAATGGGACGT
CCCGTAAGGTTCTCTTCTGGCAGGACCTGGACCAGCCAAGGGCCATTGCCCTG
GATCCTGCACATGGGTACATGTACTGGACTGACTGGGGGAAGCACCCCCGGAT
CGAGCAGGGCAGGGATGGATGGCAGTACCCGAAGATCATTGTAGACTCCGACA
TTTACTGGCCAATGGGCTGACCACCGACCTGGAGGAACAGAACAGCTGTACTGG
GCCGATGCCAAGCTCAGCTTCATCCACCGTCCAACCTGGACGGCTCCTCCG
GCAGAAGGTGGTGGAGGGCAGCCTCACTCACCCCTTGCCCTGACACTCTG
GGGACACACTCTACTGGACAGACTGGCAGACCCGCTCCATCCACGCCCTGCAAC
AAAGTGGACAGGGGAGCAGAGGAAGGAGATCCTTAGTGCTCTGTACTCACCAT
GGACATCCAAGTGCTGAGCCAGGAGCAGCCTCCACACACCATGCG
AGGAGGACAACGGTGGCTGTTCCCACCTGTGCCTGCTGCCCCGAGGGAGCCT
TTCTACTCCTGTGCCTGCCCACTGGTGTGCAGTTGCAGGACAATGGCAAGAC
GTGCAAGACAGGGGCTGAGGAAGTGCTGCTGGCTCGAGGACAGACCTGA
GGAGGATCTCTGGACACCCCTGACTTCACAGACATAGTGCTGCAGGTGGC
GACATCCGGCATGCCATTGCCATTGACTACGATCCCTGGAGGGCTACGTGTA
CTGGACCGATGATGAGGTGCGGGCTATCCGAGGGCGTACCTAGATGGCTCAG
GTGCGCAGACACTTGTGAACACTGAGATCAATGACCCGATGGCATTGCTGTG
GAUTGGTCGCCCGAACCTCTACTGGACAGATAACAGGCACTGACAGAACATTGA
GGTGAUTCGCCTCAACGGCACCTCCGAAAGATCCTGGTATCTGAGGACCTGG
ACGAACCGCGAGCCATTGTGTTGCACCCCTGTGATGGCCTCATGTACTGGACA
GAUTGGGGGAGAACCCAAAATCGAATGCGCCAACCTAGATGGAGAGATCG
GCATGTCTGGTAACACCTCCCTGGTGGCCAATGGACTGGCCCTGGACC
TGCAGGAGGGCAAGCTGTACTGGGGGATGCCAAACTGATAAAATCGAGGTG
ATCAACATAGACGGACAAAGCGGAAGACCCCTGCTGAGGACAAGCTCCCACA
CATTGGTTCACACTGCTGGGGACTTCATCTACTGGACCGACTGGCAGA
GACGCAGTATTGAAAGGGTCCACAAGGTCAAGGCCAGCCGGATGTCATCATT
GATCAACTCCCCGACCTGATGGACTCAAAGCCGTGAATGTGGCCAAGGTTGT
CGGAACCAACCCATGTGCGGATGGAATGGAGGGTGCAGCCATCTGTGCTTCT
TCACCCACGTGCCACCAAGTGTGGCTGCCCATGGCCTGGAGCTTGAGT
GACATGAAGACCTGCATAATCCCCGAGGCCTTGGTATTCAACAGCAGAGC
CACCATCCACAGGATCTCCCTGGAGACTAACAAACAGATGTGGCTATCCCAC
TCACGGGTGTCAAAGAGGCCTGCACTGGACTTGTGATGTCCAACAATCAC

FIGURE 1A

ATCTACTGGACTGATGTTAGCCTCAAGACGATCAGCCGAGCCTCATGAATGG
 GAGCTCAGTGGAGCACGTGATTGAGTTGGCCTCGACTACCCTGAAGGAATGG
 CTGTGGACTGGATGGGCAAGAACCTCTATTGGCGGACACAGGGACCAACAGG
 ATTGAGGTGGCCCGGCTGGATGGGAGTCCTGGCAGGTGCTTGTGGAGAGA
 CCTTGACAACCCCAGGTCTCTGGCTCTGGATCCTACTAAAGGCTACATCTACT
 GGACTGAGTGGGGTGGCAAGCCAAGGATTGTGCGGGCCTCATGGATGGGACC
 AATTGTATGACACTGGTAGACAAGGTGGCCGGCAACGACCTCACCATTGA
 TTATGCCGACCAGCGACTGTACTGGACTGACCTGGACACCAACATGATTGAGT
 CTTCCAACATGCTGGTCAGGAGCGATGGTGTAGCTGACGATCTGCCCTAC
 CCGTTGGCCTGACTCAATATAGCGATTACATCTACTGGACTGACTGGAACCT
 GCATAGCATTGAACGGCGGACAAGACCAAGTGGCGGAACCGCACCCCTCATCC
 AGGGTCACCTGGACTTCGTCATGGACATCCTGGTGTCCACTCCTCCGTCAAG
 GATGGCCTCAACGACTGCGTGCACAGCAATGGCCAGTGTGGCAGCTGTGCCT
 CGCCATCCCCGGAGGCCACCGCTGTGGCTGTGCTTCACACTACACGCTGGACC
 CCAGCAGCCGCAACTGCAGCCGCCCTCCACCTTCTGCTGTCAGCCAGAAA
 TTTGCCATCAGCCGGATGATCCCCGATGACCAGCTCAGCCGGACCTTGTCCCT
 ACCCCTCATGGGCTGAGGAACGTCAAAGCCATCAAATGACCCGCTGGACA
 AGTTCATCTACTGGGTGGACGGGCCAGAACATCAAGAGGGCAAGGACGAC
 GGTACCCAGCCCTCCATGCTGACCTCTCCAGCCAAAGCCTGAGCCCAGACAG
 ACAGCCACACGACCTCAGCATTGACATCTACAGCCGGACACTGTTCTGGACCT
 GTGAGGCCACCAACACTATCAATGTCCACCGGCTGGATGGGATGCCATGGGA
 GTGGTGCCTCGAGGGGACCGTGACAAGCCAAGGGCATTGCTGTCAATGCTGA
 GCGAGGGTACATGTACTTACCAACATGCAGGACCATGCTGCCAAGATCGAGC
 GAGCCTCCCTGGATGGCACAGAGCGGGAGGTCTCTTCACCACAGGCCTCATC
 CGTCCCGTGGCCCTTGTGGTGGACAATGCTCTGGCAAGCTCTGGTGG
 TGCCGACCTAAAGCGAATCGAAAGCTGTGACCTCTGGGCCAACCGCCTGA
 CCCTGGAAGATGCCAACATCGTACAGCCAGTAGGTCTGACAGTGCTGGCAGG
 CACCTCTACTGGATCGACCGCCAGCAGCAGATGATCGAGCGCGTGGAGAAGAC
 CACTGGGACAAGCGGACTAGGGTTAGGGCCGTGTCACCCACCTGACAGGCA
 TCCATGCCGTGGAGGAAGTCAGCCTGGAGGAGTTCTCAGCCCCTTGCGCC
 CGAGACAATGGCGGCTGCTCCACATCTGTATGCCAAGGGTATGGAACACC
 GCGCTGCTCGTGGCCCTGTCCACCTGGTGTGCTCCTGCGAGAACCTGCTGACTTG
 GTGAGCCTCCTACCTGCTCCCTGATCAGTTGCATGTACCAACTGGTGAGATC
 GACTGCATCCCCGGAGCCTGGCGTGTGACGGCTCCCTGAGTGTGCTGACCA
 GAGTGATGAAGAAGGCTGCCAGTGTGCTCCGCTCTCAGTTCCCTGCGCTC
 GAGGCCAGTGTGGACCTGCGGTTACGCTGCGACGGTGAGGCCACTGCCAG
 GATCGCTCTGATGAAGCTAACCTGCGATGCTGTCTGTCTGCCAATCAGTTCCG
 GTGCACCAGCGGCCAGTGTGCTCATCAAGCAACAGTGTGACTCCTCCCCG
 ACTGTGCTGATGGGTCTGATGAGCTCATGTGTGAAATCAACAAAGCCACCCCT
 GATGACATCCCAGCCCACAGCAGTGCCATTGGGCCGTCAATTGGTATCATCCT
 CTCCCTCTCGTCATGGCGGGGTCTACTTGTCTGCCAGCGTGTGATGTGCC

FIGURE 1B

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AGCGCTACACAGGGGCCAGTGGGCCCTTCCCCACGAGTATGTTGGTGGAGCC
CCTCATGTGCCTCTCAACTCATAGCCCCAGGTGGCTCACAGCACGGTCCCTT
CCCAGGCATCCCGTGCAGCAAGTCCGTGATGAGCTCCATGAGCCTGGTGGGG
GGCGCGGCAGCGTGCCCCCTCTATGACCGGAATCACGTCACTGGGCCTCATCC
AGCAGCTCGTCCAGCACAAAGGCCACACTATATCCGCCATCCTGAACCCACC
CCCGTCCCCGGCCACAGACCCCTCTCTACAACGTGGACGTGTTTATTCTT
CAGGCATCCCGGCCACCGCTAGACCATAACAGGCCCTACGTCATTGAGGTATG
GCACCCCCAACAAACACCGTGCAGCACAGATGTGTGTGACAGTGAACAGC
CAGTCGCTGGAAGAGCAGCAAATACTACACTGGACTTGAATTGGACTCAGACC
CCTACCCCCCCCCGCCACCCCCCACAGCCAGTACCTATCTGCAGAGGACAGC
TGCCCACCCCTCACCAGGCACTGAGAGGAGTTACTGCCACCTCTTCCGCC
ACCGTCCCCCTGCACGGACTCGTCCTGACCTCGGCCGTCCACCCGGCCCTGCT
GCCTCCCTGTAAATATTAAATATGAACAAAGGAAAATATATTGAT
TTAAAAAAATAAATATAATTGGGTTTAAACAAGTGAGAAATGTGAGCGGTGA
AGGGGTGGGCAGGGCTGGGAAACTTTCTAG (SEQ ID NO: 3)

FIGURE 1C

49

METAPTRAPPPPPPPLLLVLYCSLPAAASPLLFANRRDVRLVDAGGVKLE
STIVASGLEAAAVDFQFSKGAVYWTDVSEEAIKQTYLNQTGAAQNIVISGL
VSPDGLACDWVGKKLYWTDSETNRIEVANLNGTSRKVLFWQDLDQPRAIALDP
AHGYMYWTDWGEAPRIERAGMDGSTRKIIVDSDIYWPNGLTIDLEEQKLYWAD
AKLSFIHRANLDGSFRQKVVEGSLTHPFALTSGDTLYWTDWQTRSIHACNKW
TGEQRKEILSALYSQMDIQVLSQERQPFHTPCEEDNGGCSHLCLLSPREPFY
SCACPTGVQLQDNGKTCKTGAEVLLARRTDLRRISLDTPDFTDIVLQVGDI
RHAIAIIDYDPLEGYVYWTDEVRAIRRAYLDGSGAQTLVNTEINDPDGIAVDW
VARNLYWTDGTDRIEVTRLNGTSRKILVSEDLDEPRAIVLHPVMGLMYWTDW
GENPKIECANLDGRDRHVLVNTSLGPNGLALDLQEGKLYWGDAKTDKIEVIN
IDGTKRKTLLLEDKLPHIFGFTLLGDFIYWTDWQRRSIERVHKVKASRDVIIDQ
LPDLMGLKAVNVAKVVGTNPCADGNGGCSHLCFFTPRATKCGCPIGLELLSDM
KTCIIPPEAFLVFTSRATIHRISLETNNNDVAIPLTGVKEASALDFDVSNNHIY
WTDVSLKTISRASFNGSVEHVIEFGLDYPEGMAVDWMGKNLYWADTGTNRIE
VARLDGQFRQVLVWRDLDNPRSLALDPTKGYIYWTEGGKPRIVRAFMGTNC
MTLVVDKVGRANDLTIDYADQRLYWTDLTNMIESSNMLGQERMVIADDLPYPF
GLTQYSDYIYWTDWNLHSIERADKTSGRNRTLIQGHLDVMDILVFHSSRQDG
LNDCVHSNGQCGQLCLAIPGGHRCGCASHYTLDPSSRNCSPPSTFLLFSQKFA
ISRMIPDDQLSPDLVLPLHGLRVKAINYDPLDKFIYWVDGRQNIKRAKDDGT
QPSMLTSPSQSLSPDRQPHDLSIDIYSRTLFWTCEATNTINVHRLGDAMGVV
LRGDRDKPRAIAVNAERGYMYFTNMQDHAAKIERASLDGTEREVLFTTGLIRP
VALVVDNALGKLFWVDADLKRIESCDLSGANRLTLEDANIVQPVGLTVLGRHL
YWIDRQQQMIEERVEKTTGDKRTRVQGRVTHTGIHAVEEVSEEFSAHPCARD
NGGCSHICIAKGDTPRCSCPVHLVLLQNLTCGEPPCTSPDQFACTTGEIDC
IPGAWRCDGFPECADQSDEEGCPVCSASQFPCARGQCVDLRLRCDGEADCQDR
SDEANCAVCLPNQFRCTSGQCVLIKQQCDSFPDCADGSDELMCEINKPPSDD
IPAHSSTAIGPVIGIILSLFVMGGVYFVCQRVMCQRYTGASGPFPHEYVGGAPH
VPLNFIAPGGSQHGPFPGIPCSKSVMSMSLVGGRGSPVLYDRNHVTGASSSS
SSSTKATLYPPILNPPPSPATDPSLYNVDVFYSSGIPATARPYRPYVIRGMAP
PTTPCSTDVCDSDYSISRWKSSKYLDLNSDSDPYPPPPTPHSQYLSAEDSCP
PSPGTERSCHLFPFFFFPCTDSS (SEQ ID NO: 2)

FIGURE 2

Construct

Gene: 193

GI Number(s): 6678715

Gene Family: EGF domain protein

Gene
Subfamily: Low-density lipoprotein receptor

Gene Sequence: full-length cDNA, Mouse

underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

```

GCCGCGGGCGCCCGAGGGCGGGAGCAAGAGGC CGCGGGAGCCCGCGAGGATCCACCGCCGCC
CGCGCGCCATGGAGCCCGAGTGAGCGCGCGCGCTCCCGCCGCCGACATGGAAAC
GGCGCCGACCCGGGCCCTCCGCCGCCGCCGCCGCTGCTGCTGCTGGTGTACTG
CAGCTGGTCCCCGCCGCCCTCACCGCTCCTGTTGAGCTGGAGTCCACCATTGTGGCCAGTGGCCTGGAGGA
GCTAGCTGCTGTAGACTTCAAGGGTGTGTACTGGACAGATGTGAGCAG
GGAGGCCATCAAACAGACCTACCTAACCGAGACTGGAGCTGCTGCACAGAACATIGTCAT
CTCGGGCCTCGTGTACCTGATGGCCTGGCCTGTGACTGGGTTGCAAGAAGCTGTACTG
GACGGACTCCGAGACCAACCGCATGGAGTTGCCAACCTCAATGGACGTCCCGTAAGGT
TCTCTTCTGGCAGGACCTGGACCAGCCAAGGGCATTGCCCTGGATCTGCACATGGTA
CATGTA CTGGACTGACTGGGGGAAGCACCCCGGATCGAGCGGGCAGGGATGGATGGCAG
TACCCGGAAGATCATTGAGACTCGCACATTACTGCCCAATGGGCTGACCACGACCT
GGAGGAACAGAACAGCTGACTGGGCCGATGCCAACGCTCAGCTICATCCACCGTGCCAACCT
GGACGGCTCTCCGGCAGAAGGGTGGAGGGCAGCCTCACTCACCCCTTGCCCTGAC
ACTCTCTGGGGACACACTCTACTGGACAGACTGGCAGACCCGCTCCATCCACGCCCTGCAA
CAAGTGGACAGGGGAGCAGAGGAAGGGAGATCCTTAGTGCTGTACTACCCATGGACAT
CCAAGTGTGAGCCAGGGAGCGGCAGCCTCCCTCCACACACCATGCGAGGAGGACACGG
TGGCTTCCCACCTGTGCCTGCTGTCCTGGAGGGAGCCTTCTACTCCCTGTGCCCTGCC
CACTGGTGTGCAGTGCAAGGACAATGGCAAGACGTGCAAGACAGGGCTGAGGAAGTGT
GCTGCTGGCTCGGAGGACAGACCTGAGGAGGATCTCTGGAACACCCCTGACTCACAGA
CATAGTGTGAGCCAGGTGGCGACATCCGCATGCCATTGCAATTGACTACGATCCCTGG
GGGACTGGTGTACTGGGAGGATGAGGTGGGGCTATCCGCAGGGCTACCTAGATGG
CTCAGGTGCGCAGAACACTTGTGAAACTGAGATCAATGACCCCGATGGCATTGCTGTGGA
CTGGGTGCCCCGGAACCTCTACTGGACAGATAACAGGCACTGACAGAAATTGAGGTGACTCG
CCTCAACGGCACCTCCCCAAAGATCCTGGTATCTGAGGACCTGGACAGACCCATGGCAGGCCAT
TGTGTTGCACCCCTGTGATGGCCTCATGTA CTGGACAGACTGGGGAGAACCCCCAAAAT
CGAATGCGCCAACCTAGATGGGAGAGATCGGCATGTCTGGTGAACACCTCCCTGGGTG
GCCCAATGGACTGGCCCTGGACCTGCAAGGAGGGCAAGCTGTACTGGGGGATGCCAAAAC
TGATAAAATCGAGGTGATCAACATAGACGGGACAAGCGGAAGACCCCTGTTGAGGACAA
GCTCCCACACATTGGGTTACACTGCTGGGGACTTCATCTACTGGACCGACTGGCA
GAGACCGAGTATTGAAAGGGTCCACAAGGTCAGGGCAGCGGGATGTCATATTGATCA
ACTCCCCGACCTGTGATGGGACTCAAAGGCTGAGTGTGGCCAAGGGTGTGCGAACCAACCC
ATGTGCGGATGGAAATGGAGGGTGAGCCATCTGTGCTTCTCCACGTGCCACCAA
GTGTGGCTGCCCTGGTATTCAACCAGCAGAGCCACCATCCACAGGATCTCCCTGGAGACTAACAA
CAACGATGTGGCTATCCCACTCACGGGTGTCAGGACCTCTGCACTGGACTTTGATGT
GTCCAACAATCACATCTACTGGACTGATGTTAGCCTCAAGACGATCAGCCGAGCCTTCAT
GAATGGGAGGCTCAGTGGAGCACGTGATTGAGTTGGCCTGACTACCTGAAGGAATGGC
TGTGGACTGGATGGCAAGAACCTCTATTGGCGGACACAGGGACCAACAGGATTGAGGT
GGCCCGGGCTGGATGGGAGGGCAGTCCGGCAGGTCCTTGAGGGAGAGACCTTGACAACCCAG
GTCTGGCTCTGGATCTACTAAAGGCTACATCTACTGGGACTGAGTGGGCTGGCAAGCC
AAGGATTGTCGGGCCTCATGGATGGGACCAATTGTATGACACTGGTAGACAAGGTGGG
CGGGGCCAACGACCTCACCATGGTATTGACCGACAGCAGCTGACTGGACTGACCTGG
CACCAACATGATTTGAGTGTGTTGCAACATGCTGGCTAGGAGCAGCAGTGGTGA TAGCTGACCA

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FIGURE 3A

TCTGCCCTACCGTTGGCCTGACTCAATATAGCGATTACATCTACTGGACTGACTGGAA
 CCTGCATAGCATTGAACGGGGCGGACAAGACCAGTGGGCGAACCGCACCCCATCCAGGG
 TCACCTGGACTTCGTCATGGACATCCTGGTGTTCACTCCTCCCGTCAGGATGGCCTCAA
 CGACTGCGTGCACAGCAATGGCCAGTGTGGCAGCTGTGGCCTCGCCATCCCCGGAGGCCA
 CGCTGTGGCTGTGCTTCACACTACAGCCTGACCCCAGCAGCCGCAACTGCAGCCGCC
 CTCCACCTTCTGCTGGTCAAGAAATTGCCATCAGCCGGATGATCCCCGATGACCA
 GCTCAGCCCCGACCTTGTCTACCCCTTCATGGGCTGAGGAACGTCAAAGCCATCAACTA
 TGACCCGCTGGACAAGTTCTACTCTGAGCTGGGCGGCCAGAACATCAAGAGGGCCAA
 GGACGACGGTACCCAGCCCTCATGCTGACCTCTCCCAGCCAAGGCTGAGCCCAGACAG
 ACAGCCACACGACCTCAGCATTGACATCTACAGCCGGACACTGTTCTGGACCTGTGAGGC
 CACCAACACTATCAATGTCCACCGCTGGATGGGATGCCATGGGAGTGGTGTGCTCGAGG
 GGACCGTGACAAGCCAAGGGCATTGCTGTCAATGCTGAGCAGGGTACATGTAACCTTAC
 CAACATGCAGGACCATGCTGCCAAGATCGAGCGAGCCTCCCTGGATGGCACAGAGCGGG
 GGTCTCTTACACAGGCCATCCGTCCCGTGGCCCTTGTGGTGGACAATGCTCTGGG
 CAAGCTCTTCTGGGTGATGCCACCTAAAGCAATCGAAAGCTGTGACCTCTCTG [GGG
 CCAACCGCTGACCTGGAAAGATGCCAACATCGTACAGCCAGTAGGCTGTGACAGTGCTGG
 GCAGGCACCTACTGGATCGACGCCAGCAGCAGCAGATGATCGAGCGCGTGGAGAACACC]
 ACTGGGACAAGCGGACTAGGGTCAAGGGCGTGTACCCACC [TGACAGGCATCCATGC
 CGTGGAGGAAGTCAGCTGGAGGGTCT] CAGCCCACATCTGTGCCCCAGAACATGGCG
 GCTGCTCCCACATCTGTATGCCAAGGGTGTGGAAACACCGCGCTGCTCGTGGCCCTGTCC
 ACCTGGTGTCTGCAGAACCTGCTGACTTGTGGTGAGCCTCTACCTGCTCCCCGTGATC
 AGTTTGATGTACCAACTGGTGGAGATCGACTGCAATCCCCGGAGCCTGGCGCTGTGACGGCT
 TCCCTGAGTGTGCTGACCGAGGTGATGAAGAAGGCTGCCCCAGTGTGTGCTCCGGCTCTCAGT
 TCCCTGCGCTCGAGGGCAGTGTGTGGACCTGCGGTTACCGCTGCGACGGTGAGGCCGACT
 GCCAGGATCGCTCTGATGAAGCTAACAGCCTGCTGCTGCCCCAATCAGTCCGGT
 GCACCAAGCGGCCAGTGTGTCTCATCAAGCAACAGTGTGACTCCTCCCCGACTGTGCTG
 ATGGGTCTGATGAGCTCATGTGTGAAATCAACAGCCACCCCTCTGATGACATCCCAGCCC
 ACAGCAGTGCCATTGGGCCGTATTGGTATCATCCTCTCCCTTGTGATGGGGGGGG
 TCTACTTTGTCTGCCAGCGTGTGATGTGCCAGCGTACACAGGGCCAGTGGGCCCTTTC
 CCCACGAGTATGGTGGAGGCCCTCATGTGCCCTCTCAACTTCATAGCCCCAGGTGGCT
 CACAGCACGGTCCCTTCCCAGGCATCCCCTGCAGCAAGTCCGTGATGAGCTCCATGAGCC
 TGGTGGGGGGCGCGGGCAGCGTGTGCCCTATGACCGGAATCACGTCACTGGGCCCTCAT
 CCAGCAGCTGCTCCAGCACAAAGGCCACACTATATCCGCCATCCTGAACCCACCCCGT
 CCCCGGCCACAGACCCCTCTCTCATCACACAGTGGACGTGTTTATCTCTCAGGCATCCC
 CCACCGCTAGACCATACAGGCCCTACGTCTTGTGAGGTATGGCACCCCCAACACACCGT
 GCAGCACAGATGTGTGACAGTGTGACTACAGCATCAGTCGCTGGAAAGGCAGCAAAACT
 ACCTGGACTGAAATTGGACTCAGACCCCTACCCCCCCCCCGCCACCCCCCACAGCCAGT
 ACCTATCTGCAGAGGACAGCTGCCACCCCTCACCAGGCACTGAGAGGAGTTACTGCCACC
 TCTTCCGCCCTTACCGTCCCCCTGCACGGACTCGTCTGACCTCGCCGTCCACCGGC
 CCTGCTGCCCTCCCTGTAATAATTAAATGAAACAAAGAAAAATATATTATGATT
 TAAAAAATAAATATAATTGGGTTTAACAAGTGAGAAATGTGAGCGGTGAAGGGGTGG
 GCAGGGCTGGGAAACTTTCTAG

Gene Sequence	3659 bp	Sequence Deleted	3701 bp
Structure *			
Size of full-length cDNA: 5119 bp			

FIGURE 3B

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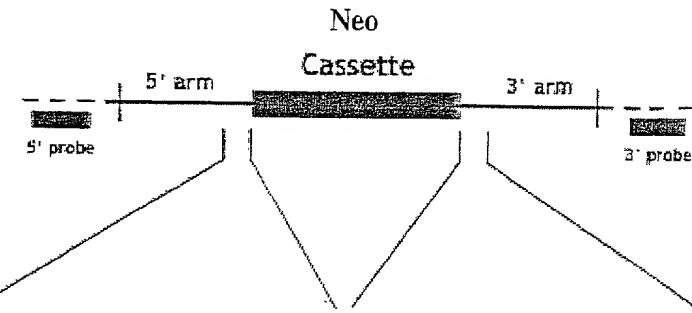
Targeting Vector* (genomic sequence)

Construct Number: 992

Arm Length:

5': 1.5 kb

3': 2.9 kb



— Targeting Vector

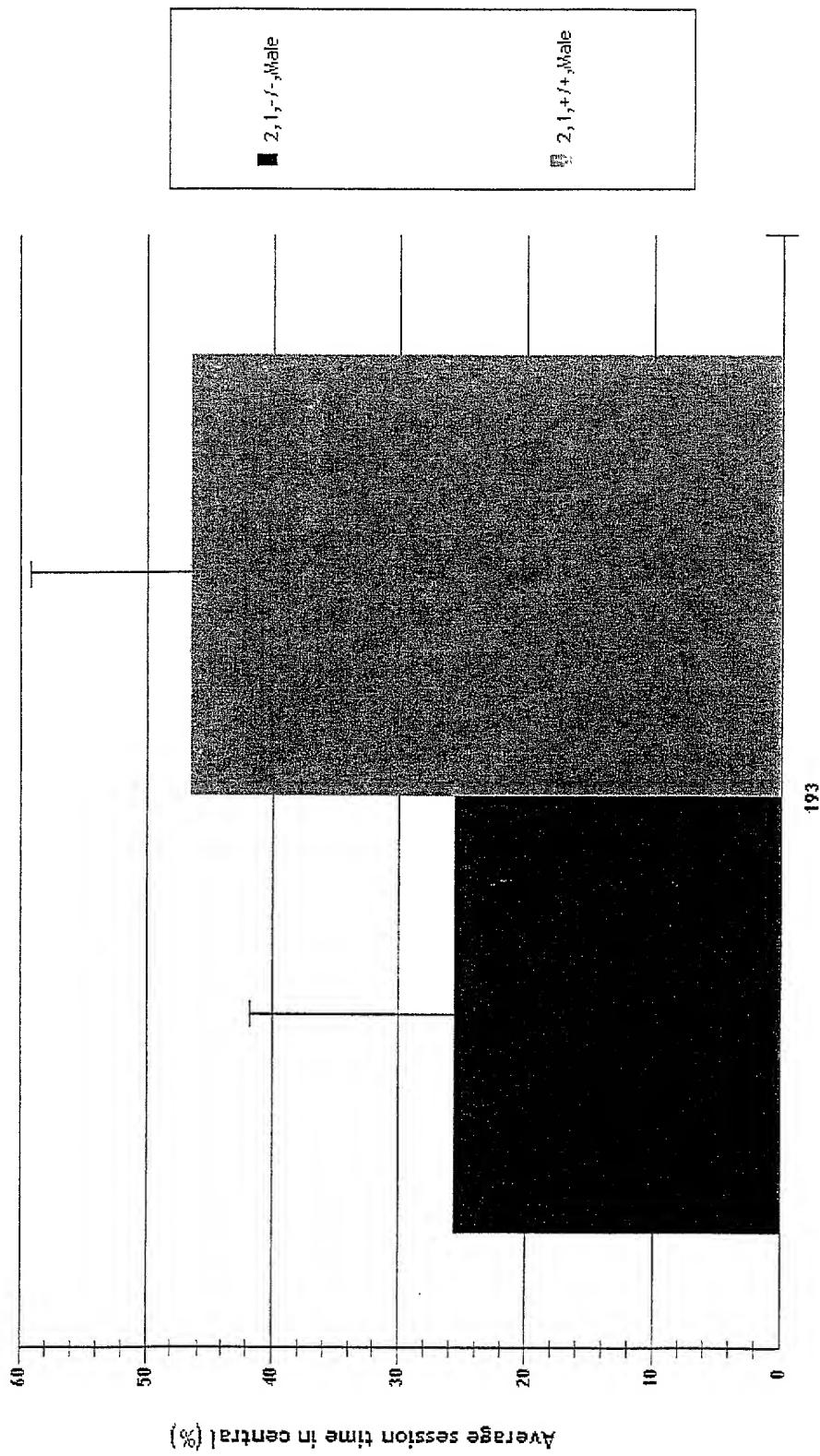
- - - Endogenous Locus

* Not drawn to scale

5' >AAAATATGCATTATCCCTGAGCA CAGTGGGTCTGGCCCTTCACTTGG CTGCCACTCATGGAGCCTTTATGC TAACCACAGGGGCAACCGCCTGA CCCTGGAAGATGCCAACATCGTAC AGCCAGTAGGTCTGACAGTGCTGG GCAGGCACCTCTACTGGATCGACC GCCAGCAGCAGATGATCGAGCGTG TGGAGAAGACC<3' (SEQ ID NO: 9) <i>b3</i>	5' >TCACTGGCATCCATGCAGTG: AGGAAGTCAGCCTGGAGGAGTTCT GTACGTGAGAGGGGACAGTCTTG TGGTGGGTCTCCTGGGGAAAGGT GAATCAGCCCTACTGGCATCAGAT GGGCTGCTGGTGCAGAGCAGTGT GCCTGAGGAGCTCATGGGCTCAGC ACCGAAGGCCAGTGCATGTCCAGA TGTCTGCCTCT<3' (SEQ ID NO: 10) <i>b4</i>
---	--

FIGURE 3C

Phenotypic Data Summary - Open Field

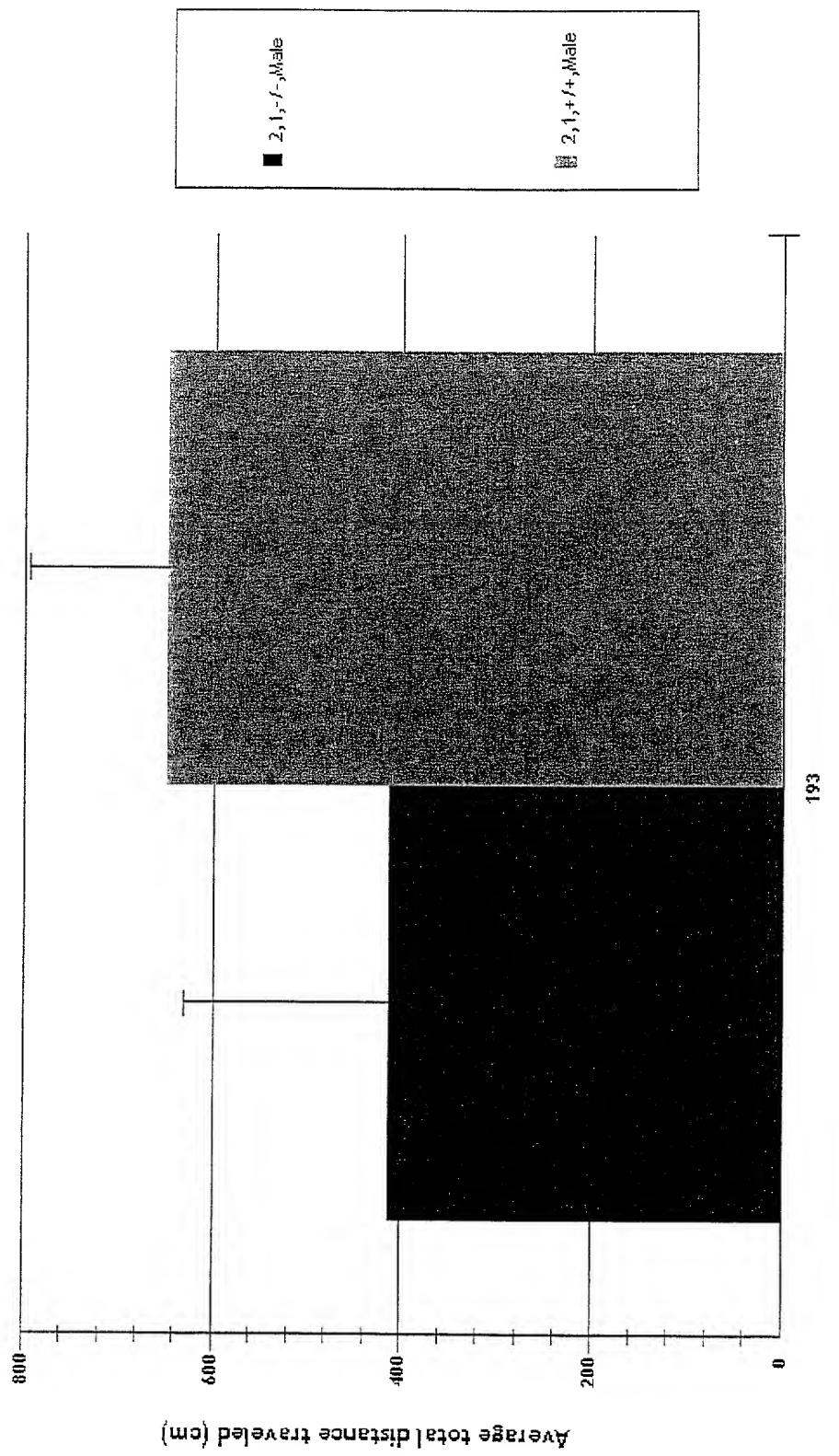


Gene

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FIGURE 4

Phenotypic Data Summary - Open Field



Gene

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FIGURE 5